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ABSTRACT

There is an obvious need for a valid, realistic model for research on the occupational needs of the community for relevant time periods to provide planners with quantified data on which to base decisions. The purpose of this study is to develop a statewide system to: (1) identify job needs at the local community level, and (2) relate job needs to training programs in the educational system. The assessment of both urban and rural community needs is difficult to derive. This model focuses on the local community, and that community's educational training system, as opposed to many other models which focus on the state or national level. Basic data sources that appear most useful in occupational needs assessments are Florida Department of Commerce quarterly employment reports, Bureau of Labor Statistics labor market trends, local Florida State Employment Service offices Job Bank data, and the U.S. Labor Department Manpower Administration forecasting documentation. This model is of interest not only to educators and manpower specialists, but also to any planner who is concerned either with the supply of trained persons or demand for training services. (Author/AH)

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A MODEL

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FOR

STATEWIDE SYSTEM FOR

COMMUNITY OCCUPATIONAL NEEDS ASSESSMENT

by:

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A MODEL FOR A STATEWIDE SYSTEM FOR COMMUNITY OCCUPATIONAL NEEDS ASSESSMENT

PURPOSE

The purpose of the study is to develop a statewide system to: a) identify job needs at the local community level, and 2) relate job needs to training programs in the educational system. The Management Information System (MIS) must apply to both the urban and rural community.

A statewide system such as this model provides is of interest not only to educators and manpower specialists, but also to any planner that is concerned either with the supply of trained persons or demand for training services. A comprehensive evaluation system with an accurate needs assessment process behind it can be an effective instrument of change within the State and local communities. An MIS of occupational needs will save millions in unnecessary manpower surveys, while allowing for consistency in planning year after year for more successful employment to each worker.

STATEMENT OF THE PROBLEM

The assessment of both urban and rural community needs is difficult to derive. Assessments have been left aggregated at the national and state levels, with an occasional needs survey for urban areas. What studies do exist seem to move from"the big picture",or national level, to the finer detail,or "inverted pyramid" -- rather than taking local community data and projecting up to"the big picture." Communities over the centuries have been left to evolve at their own rate of speed, with whatever imbalances develop; depleting whatever resources are available by anyone who has the whim and support to do so; letting shortages and gaps lay dormant or expand while surpluses also expand. When research efforts have resulted with worthwhile techniques to determine occupational needs, often the material is shelved or used as case studies categorized as 'academic' rather than

implemented and developed further for practical application by planners. It is high time that a technique capable of presenting a total view of manpower needs -- that at the same time will be logical and straightforward for local planners to use -- be developed. An occupational needs assessment has as its foremost objective: the wholesome future for each trained person. The technique developed for assessing occupational needs must, therefore, be truly representative of the total picture of community needs. And thus needs must be derived at the local level and projected up the ladder to the state and national level, rather than derived at the regional, state, or national level and projected or disaggregated downward to the local level. Emphasis in local planning first makes for more realistic planning while also focusing more concern for the local person being trained.

PROJECT DESCRIPTION

The major goal is to develop a valid, realistic model to research the occupational needs of the community for relevant time periods to provide planners with quantified data on which to base decisions. Specifically the model shall provide data on present and future occupational training needs for both rural and urban communities, place the job skill needs identified in a priority ranking, and relate the occupational need data to the labor market and educational curriculum.

How the Project Will Be Performed

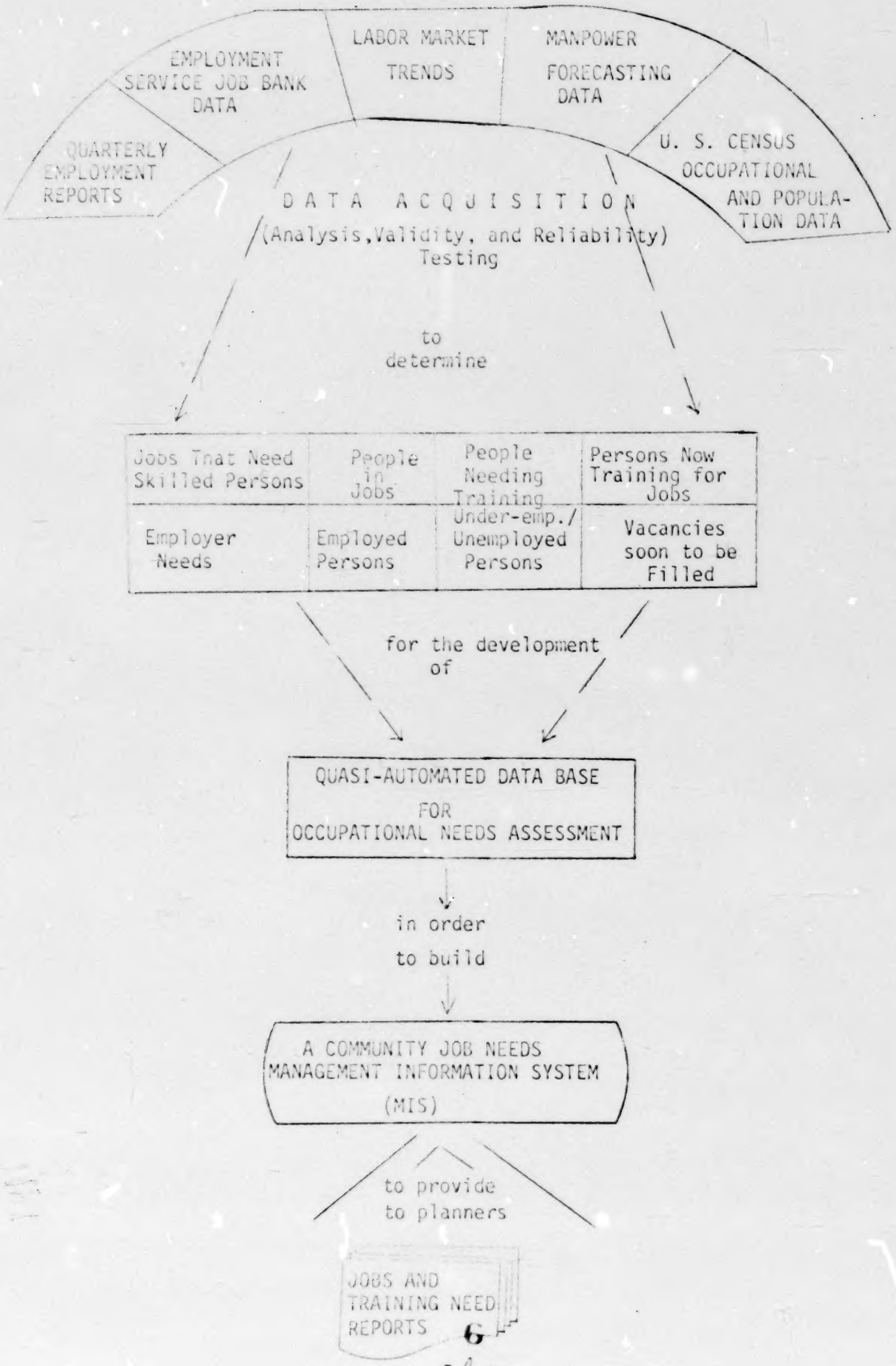
Over the past two years, the Center for Community Needs Assessment has developed a process method to ascertain occupational needs on a continuous basis for local communities. It has been designed using an urban community (Jacksonville) and an educational institution (Florida Junior College at Jacksonville) as the prototype. It now needs to be tried out on other urban areas so that the process method can be refined and validated.

The method needs to also be tried out on rural communities to see if

the same procedure for identifying job needs in urban areas will apply to rural areas. Job bank data are available for local offices whether the offices are large or small -- and now the entire State of Florida has been computerized for more up-to-date study of job openings, as well as applicants for job openings. Since much research has been funded at the National level to ascertain the value of the Job Bank data since 1968, it has been found that the Employment Service Job Bank data are representative of upwards of 30% of all job vacancies in a community. Thus a tremendously valuable data source exists, now that employer requests are updated daily, to help local planners know something about the distribution of "need" in the community.

Next, given the logical steps that end up with a listing of job needs in highest priority, all educational institution programs in the given community with the number of persons trained by program can be matched to the actual needs. Bear in mind that the Job Bank data will not provide all needs, but will definitely give the magnitude and proper direction in which job needs are moving.

Processes of the model include predictions of the number of job openings, the number of jobs filled, and the remaining unfilled needs that can be forecast based upon local, regional, and State data. Current and future estimations of the number of students being trained in private and public institutions within these occupations, and identification of the unmet need with future curricular significance, will also be part of the model process. Output from the model process become, both, input data to successive stages of the information system for educational training and planning data for urban and regional manpower planners in future resource allocation and economic impact studies. Figure 1 shows how data sources flow into the model to relate the job market demand to training needs for a community.


EMPLOYMENT SERVICE JOB BANK DATA
LABOR MARKET TRENDS
MANPOWER FORECASTING DATA
QUARTERLY EMPLOYMENT REPORTS
U. S. CENSUS OCCUPATIONAL AND POPULATION DATA
DATA ACQUISITION
(Analysis, Validity, and Reliability) Testing
to determine
Jobs That Need Skilled Persons
People in Jobs
People Needing Training
Persons Now Training for Jobs
Employer Needs
Employed Persons
Under-emp./ Unemployed Persons
Vacancies soon to be Filled
for the development of
QUASI-AUTOMATED DATA BASE FOR OCCUPATIONAL NEEDS ASSESSMENT
in order to build
A COMMUNITY JOB NEEDS MANAGEMENT INFORMATION SYSTEM (MIS)
to provide to planners
JOBS AND TRAINING NEED REPORTS

Relationship of Data Sources

After heavy research and working with many community advisory committees, manpower planning councils, and educational/governmental agencies, four basic data sources appear most useful from which selected information on occupations should be gleaned. They are the Florida Department of Commerce quarterly employment reports, Bureau of Labor Statistics labor market trends, local Florida State Employment Service offices Job Bank data, and the U. S. Labor Department Manpower Administration forecasting documentation. Census data are used to compare occupational need distributions to the patterns of community population and occupational growth patterns, as well as for establishing benchmark figures.

Specific data needed in the model include:

1. Location indicators for identifying where jobs exist.
2. Major occupational categories within major business/industry classifications.
3. Number of jobs available or openings by occupation, and the number being placed.
4. Primary characteristics of the job openings, such as seasonal vs. temporary, part-time or full-time, regular or contract work.
5. Requirements of employers for the person they want to fill the job, such as education, experience, and past history of work.
6. Length of time jobs take to fill, and whether or not they are ever filled.
7. Turnover rates, replacements, and persons interviewed.
8. Salary range the employer is willing to pay.
9. Educational programs with number of persons trained.

In order to compare data across the various coding and classification schemes, analysis must be included for translating and relating occupations to training. Compatibility across occupation codes, education codes, and industry codes must be included.

Occupational "needs" are approached from both perspectives: from the detail data working up to aggregate figures for the local area, and from the aggregate data at district and State level working down to the local community detail. There are many advantages and disadvantages to both methods. It is the opinion, however, that whenever possible, local data provides the least frustrations in analysis and reliability. It is far easier to aggregate from detail than to use correlations and hypothesize relationships to break down aggregated larger area data, and result with far less standard error.

Major Emphasis in Data Analysis

In a needs assessment model the target or purpose is unique also. The total existing occupational distribution serves to show what is presently happening, as well as to build historical records for trending occupational growth. Data that provide a view of "need", however, focus on what is not distributing into the existing occupational structure -- where action could be taken to change or improve on a present growth pattern.

Thus Job Bank will receive the major emphasis in building the need matrix since it has the widest coverage and relevance to local communities. It is believed that if an employer's need is truly great for persons with special skills, he will make use of all the help he can get to find some trained person, and that includes the Job Bank free service.

It is agreed that a company may also utilize private employment agencies. But if the need is great enough the employer (and you will find the private employment agency will also) will have listed with many employment agencies. Thus, only Job Bank data should be used or one takes the chance of duplication of job information and over-projecting if many agencies are included.

It is recognized that Job Bank data will present a skewed view if one were to categorically state that "these are the total needs in an area." Certain occupational skills are not presently sought through the Employment Service. However, it is maintained that if the need is great enough for

certain job skill, then employers will make use of the service. And as the Job Bank system improves (it has only been totally computerized since February, 1974 in Florida), better services can be provided and more employers and applicants will make use of the available help. Thus the data will continue to closer approximate and represent the greater needs in the community.

THE VALUE OF THIS RESEARCH

The relationship of unfilled job openings to total occupational needs in a local community is literally a research bombshell provided through the Employment Service. Therefore, the new methodology proposed in the Needs Assessment Model, is beginning with a penetration of the most valuable data source available. Although continual experimentation studies show increases in the use of Job Bank by employers, thus increasing the percentage of job vacancies represented for a given community, there is still little use made of the data for planning purposes. Probably a main reason has been because until recently the data were not computerized, and because local research efforts have received the least funding with the bulk of monies continuing to be spent on one-time surveys or aggregate national and state studies.

It is high time that the city or small community had data available on a continuous basis -- quantifiable -- on its individual community needs. This model focuses on the community,and that community's educational training system. A process for assessing job needs should always lie first and utmost at the heart of humanistic planning for tomorrow, and be the first step in the total management information system. It is an instrument useful to planners for identifying shortages of manpower, as well as surpluses. It is also useful for weighing the benefit of offering training in one skill area versus another.

Spin-off benefits for state manpower planners and educators include: total persons trained in selected occupational programs in a given geographic region can be compared to the expanding job needs to see if the training is

adequate, in-out migration patterns can be used in conjunction with the data retrieved from the model to make decisions on how many training programs must be provided versus how many persons will be coming in to fill the jobs; programs too small to offer for one local community can be consolidated with another local area's needs in order to train persons; occupational programs being offered and the number of graduates can be compared to the number of existing jobs in the surrounding area as well as the State (to determine if a different mix of programs or concentration on selected programs would better meet the needs of the job market and thus facilitate a higher rate of job placement from these instructional programs); and information could be mined to determine the numbers of technically qualified persons available for employment on a flow basis and to examine occupational training resources available which impact this flow.

CONCLUSION

The Needs Assessment Model is a planning tool that can provide data never available before to local planners, as well as to district, regions, and States. The procedures make the model useful for State-wide planning through relatively straight-forward steps. The techniques are innovative, direct, inexpensive, and will require small amounts of time by research analysts -- once the model has been expanded to serve the rural area and further validated for urban areas (the time-consuming, meticulous detail stage).

The model focuses on the gleaning of currently collected data from the best sources available within each community. The nucleus of the model develops around a single source -- that of Job Bank data -- with the underlying principle that a single source will be more accepted and adopted into planning offices. And, as the model is up-dated, predictive procedures validated,

and the necessary corrective action from evaluation is used to improve the model's effectiveness, more subsystems can be added to the basic model if sufficient personnel within organizations are assigned to the planning function. By building a logical stepping-stone procedure, it is believed that the smallest educational institution or manpower planning office could use the model to project the local community's needs.

Useful data result from this model process that focus on the training needs of the community from an employment perspective. Questions can be answered such as: What are the job needs and their associated training requirements? What is projected for the years to come? Do we want this trend we see occurring to continue within our job mix? Are t[illegible] major shortages and gaps among jobs in our communities? Are our educational programs meeting the needs for special skills? What will the economic balance be in our community if this trend continues?

Let's make the assessment of community needs an integral part of State-wide planning and local community planning. If we do not, then imbalances will continue, our children in small communities will be left with no choice except to commute to the big city for work or migrate completely our of the area, the stabilizing balances within the community will shift and many rural areas will become ghost towns, inner cities will deteriorate with more push into the suburbs since needs cannot be met within the hub, and a restlessness will impact the community as surplus workers move into unemployment and workers in shortage categories find no time for leisure.

This model is indeed a major step toward providing data to aid community planners in avoiding unwanted change.

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